

Public Health Preparedness and Situational Awareness Report: #2019:22

Reporting for the week ending 06/01/19 (MMWR Week #22)

June 7, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

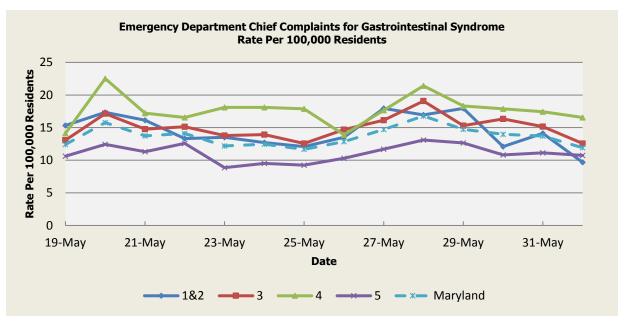
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

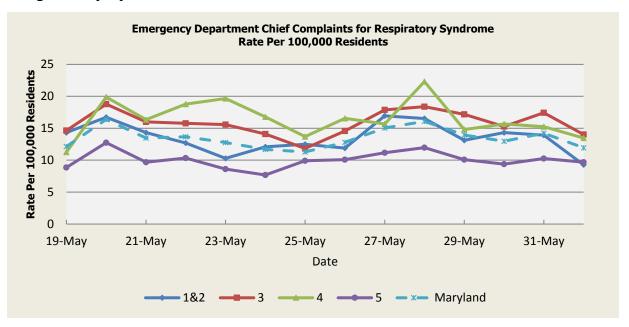


There were no Gastrointestinal Syndrome outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	13.24	15.11	15.89	10.23	13.15		
Median Rate*	13.11	14.87	15.46	10.13	12.98		

^{*} Per 100,000 Residents

Respiratory Syndrome

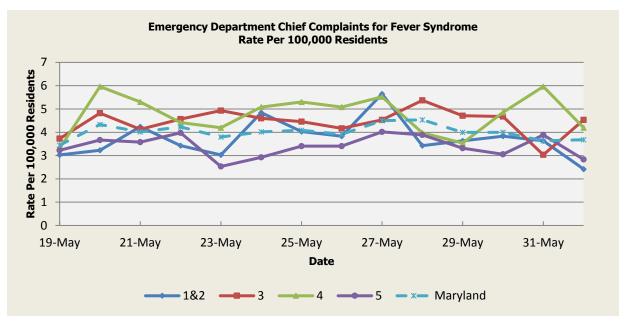


There was one (1) Respiratory Syndrome outbreak reported this week: one (1) outbreak of Legionellosis associated with a Condominium Building (Region 4).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	12.66	14.75	15.09	9.99	12.78	
Median Rate*	12.10	14.21	14.35	9.65	12.28	

^{*} Per 100,000 Residents

Fever Syndrome

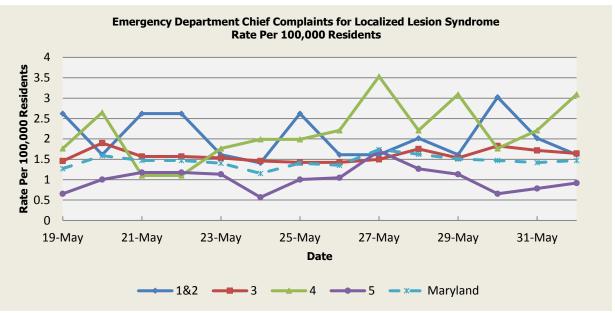


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.07	3.90	4.10	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

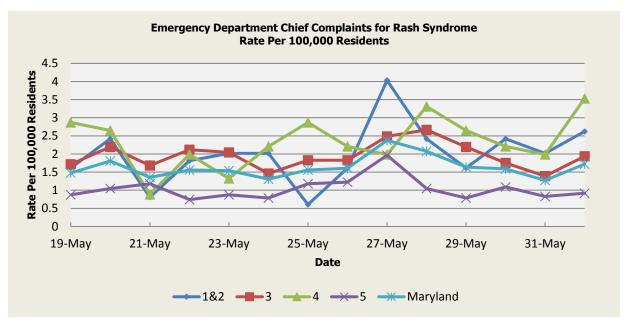


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.11	1.80	2.03	0.91	1.42	
Median Rate*	1.01	1.72	1.99	0.87	1.36	

^{*} Per 100,000 Residents

Rash Syndrome

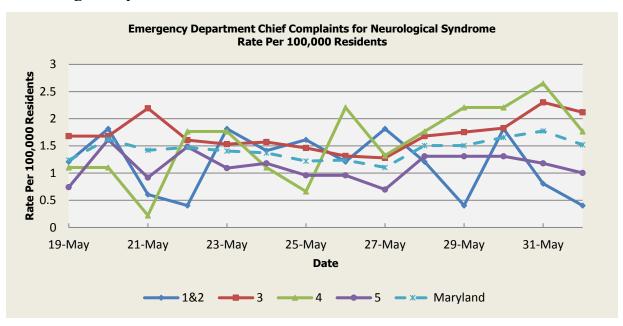


There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Scabies in an Assisted Living (Region 3).

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.23	1.68	1.76	0.98	1.38	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

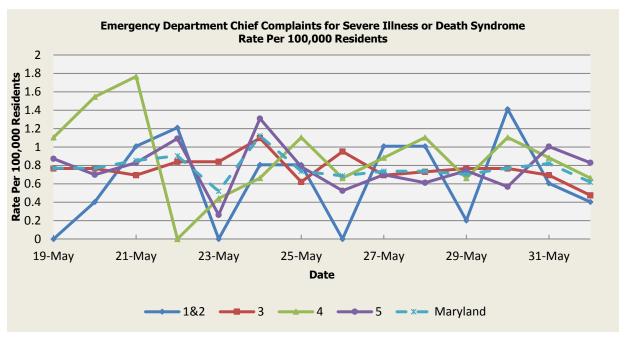


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.77	0.94	0.85	0.59	0.78	
Median Rate*	0.60	0.84	0.66	0.52	0.69	

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



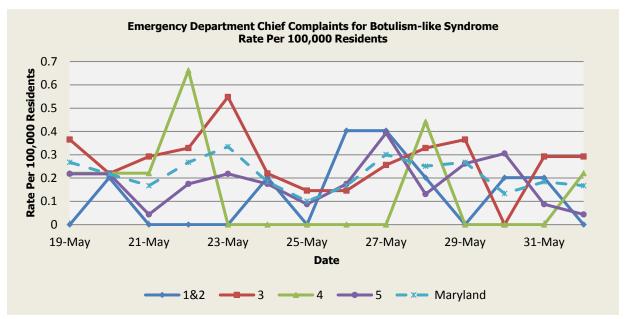
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data							
	January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.66	0.90	0.83	0.51	0.73			
Median Rate*	0.60	0.84	0.66	0.48	0.69			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

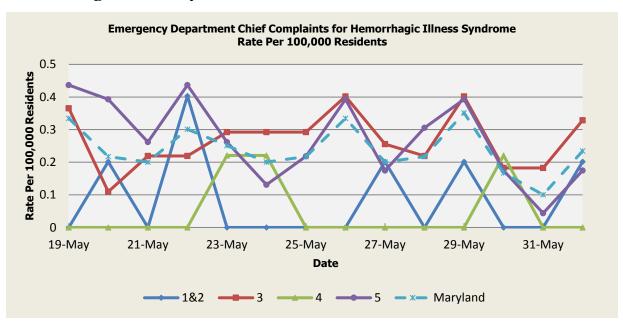


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 5/19 (Regions 3,4,5), 5/20 (Regions 1&2,4,5), 5/21 (Regions 3,4), 5/22 (Regions 3,4,5), 5/23 (Regions 3,5), 5/24 (Regions 1&2,5), 5/26 (Regions 1&2,5), 5/27 (Regions 1&2,3,5), 5/28 (Regions 1&2,3,4), 5/29 (Regions 3,5), 5/30 (Regions 1&2,5), 5/31 (Regions 1&2,3), 6/1 (Regions 3,4). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.06	0.08	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

 $^{* \,} Per \, 100,\!000 \, Residents$

Hemorrhagic Illness Syndrome

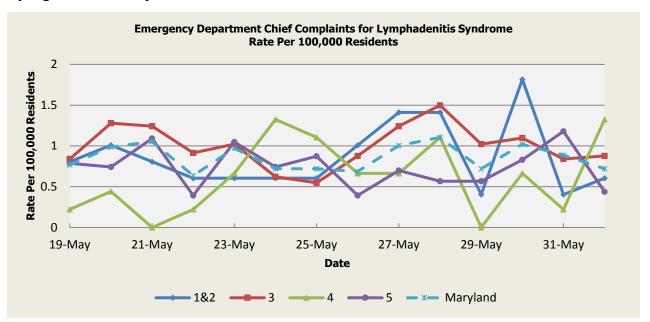


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 5/19 (Regions 3,5), 5/20 (Regions 1&2,5), 5/21 (Region 5), 5/22 (Regions 1&2,5), 5/23 (Regions 4,5), 5/24 (Region 4), 5/25 (Region 5), 5/26 (Regions 3,5), 5/27 (Regions 1&2,5), 5/28 (Region 5), 5/29 (Regions 1&2,3,5), 5/30 (Regions 4,5), 6/1 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.04	0.16	0.04	0.13	0.13		
Median Rate*	0.00	0.07	0.00	0.09	0.08		

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 5/19 (Regions 1&,52), 5/20 (Regions 1&2,3,5), 5/21 (Regions 1&2,3,5), 5/23 (Region 5), 5/24 (Regions 4,5), 5/25 (Regions 4,5), 5/26 (Regions 1&2), 5/27 (Regions 1&2,3), 5/28 (Regions 1&2,3,4), 5/30 (Regions 1&2,5), 5/31 (Region 5), 6/1 (Region 4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.36	0.58	0.40	0.37	0.47		
Median Rate*	0.40	0.47	0.44	0.31	0.42		

^{*} Per 100,000 Residents

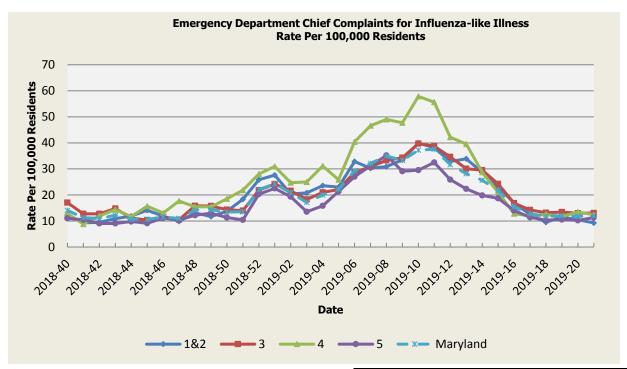
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
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SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

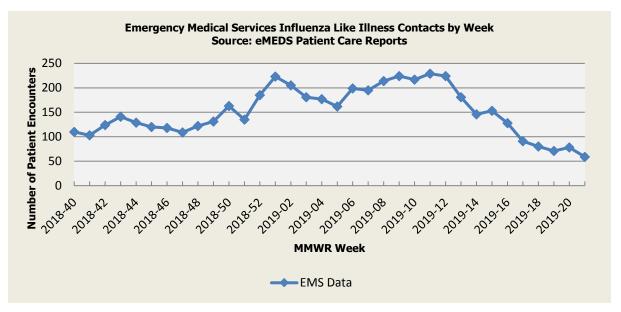
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.26	13.39	12.94	11.33	12.30	
Median Rate*	7.66	10.38	9.27	8.80	9.49	

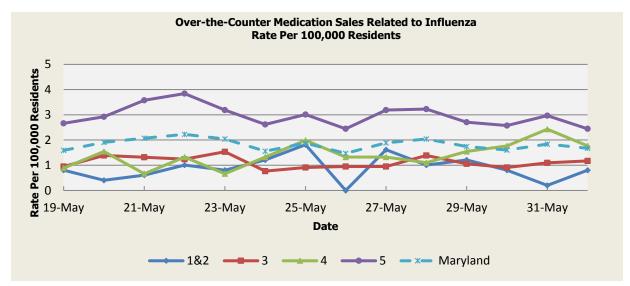
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

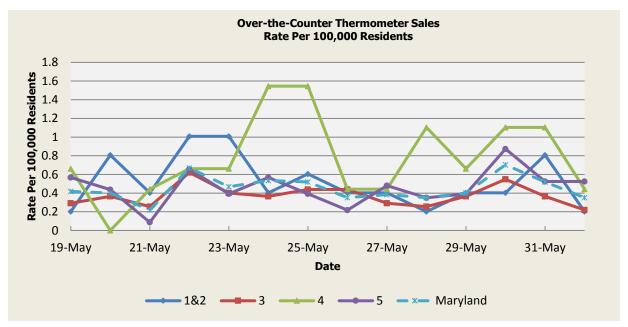


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.55	4.58	2.71	7.99	5.66
Median Rate*	2.82	3.76	2.43	7.29	4.94

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.03	2.89	2.29	3.84	3.22
Median Rate*	2.82	2.74	2.21	3.71	3.11

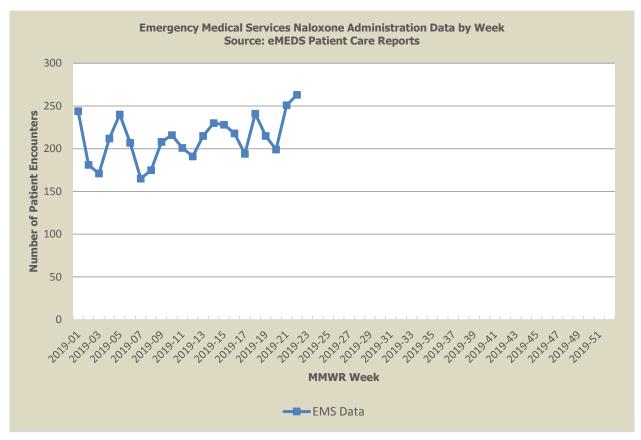
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

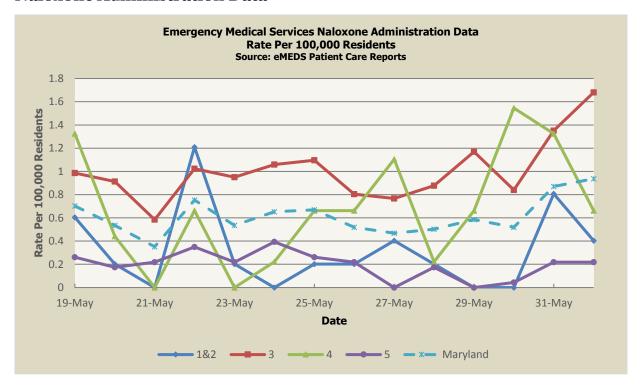
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of June 6, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (**OHIO**), 02 Jun 2019, At least 7 cases of Legionnaires' disease have been confirmed in individuals who recently received treatment at Mount Carmel Grove City, hospital officials said on Friday night [31 May 2019]. The hospital says it is partnering with Franklin County Public Health and the Ohio Department of Health in conjunction with the Centers for Disease Control and Prevention to identify the source of the bacteria. They will continue testing over the next few weeks. Read More: http://www.promedmail.org/post/6499689

TULAREMIA (**NEW MEXICO**), 31 May 2019, New Mexico state health officials are reporting two confirmed cases of tularemia in 2019 among 2 residents of Santa Fe County: a 57 year old man and a 72 year old woman. Tularemia is a rare infection caused by the bacteria _Francisella tularensis_ that can spread through insect bites, with deer flies and ticks being the

primary vectors in New Mexico. It can also be spread through handling infected animal tissues in situations such as hunting, trapping and skinning of rabbits or other rodents or during the clean-up of rodent carcasses while gardening. Read More: http://www.promedmail.org/post/6497308

INTERNATIONAL DISEASE REPORTS

NIPAH VIRUS (INDIA), 06 Jun 2019, A 23-year-old college student [in Kochi, Kerala] has been confirmed to be infected with the Nipah virus while 86 others are under medical observation, Kerala Health Minister KK Shailaja said [4 Jun 2019]. The results of blood samples of the student, which were tested at the National Institute of Virology (NIV) in Pune, have confirmed Nipah [virus], she said. The result came this morning [4 Jun 2019], she added. Earlier, blood samples examined at 2 virology institutes -- Manipal Institute of Virology and Kerala Institute of Virology and Infectious Diseases -- had indicated Nipah [virus]. Read More: http://www.promedmail.org/post/6506261

JAPANESE ENCEPHALITIS (TAIWAN), 05 Jun 2019, Health officials report two additional confirmed cases of Japanese encephalitis. The cases were in the Eastern District of Chiayi City and the Zuoying District of Kaohsiung City. The Department of Disease Control said that the two new cases were a 50-year-old male from Chiayi City and a 50-year-old female from and Kaohsiung City. Both had no recent history of foreign travel. They developed fever/symptoms on 21 and 23 May 2019, respectively. The two cases are currently being treated in the intensive care unit. Read More: http://www.promedmail.org/post/6504174

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Region 3	Baltimore County		
Kegion 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

